



2020 Suggested Courses for Biomedical Engineering (BMED) 2020 – 2021 Catalog

1) Major course options:

- **May already be fulfilled with transfer credit; check prerequisites**
- BMED 101 (1)*: Introduction to the Biomedical Engineering Major* (required in fall 2020, reach out to BMED Department for permission to enroll in this course. See contact info. below)
Take BMED 102 (1): Introduction to Biomedical Engineering Analysis in Winter 2021 (this course is only offered once a year)
- BMED 212 (3): Introduction to Biomedical Engineering Design
- BMED 310 (4) ^: Biomedical Engineering Measurement and Analysis
- Some BMED courses are offered once or twice a year; for planning purposes, refer to the [Catalog Website](#) or [Terms Typically Offered Website](#) for the term courses are typically offered.

2) Support course options:

- **May already be fulfilled with transfer credit; check prerequisites**
- CE 204 (3)*: Mechanics of Materials I (See notes in Concentration Courses)
- CSC 231 (2)*: Programming for Engineering Students
- EE 201 (3)*: Electric Circuit Theory (see notes in Bioinstrumentation Concentration)
- MATE 210 (3)^: Materials Engineering
- ME 211 (3)^: Engineering Statics
or ME 212 (3)^: Engineering Dynamics
or ME 302 (3): Thermodynamics I
or/and ME 341 (3): Fluid Mechanics I
- STAT 312 (4): Statistical Methods for Engineers
- BIO 161 (4): Introduction to Cell and Molecular Biology
or BIO 231 (5): Human Anatomy and Physiology I
or BIO 232 (5): Human Anatomy and Physiology II

***Course is required or strongly recommended in fall due to course availability or prerequisites**

^Course should be taken as soon as possible

3) General Education (GE) course options:

- **May already be fulfilled with transfer credit; check prerequisites**
- Any remaining lower division GE course(s).
- Upper-Division C
- The [Graduation Writing Requirement \(GWR\) must be fulfilled](#) before graduation by either enrolling in a GWR-approved, upper-division English course (which can double-count with the Upper-Division C) OR by registering for the Writing Proficiency Examination (WPE). GWR courses are searchable on Schedule Builder.

- The [United States Cultural Pluralism \(USCP\) requirement must be satisfied before graduation.](#) USCP courses may double-count with a remaining GE requirement and are searchable on Schedule Builder.

4) Additional notes:

- Recommended that you enroll in 12 – 16 units.
- Concentrations: we encourage you to declare your concentration during your first year. [Concentration options for your major](#)
[Instructions for declaring your concentration](#)

Concentration Courses (General Curriculum):

- CE 207 (2)*: Mechanics of Materials II (see note below regarding CE 204 and CE 207)
Or EE 321 (3): Electronics (check prerequisite)
 - If you have taken equivalent to CE 204 but not CE 207, enroll in CE 207.
 - If you still need CE 204 and CE 207, you can take them separately over two quarters OR enroll in CE 208 (5): Mechanics of Materials, which is designed specifically for transfers students this fall quarter. This course combines CE 204 and CE 207.
- ME 228 (2): Engineering Design Communication
- Additional concentration courses can be found on [the catalog](#).

Concentration Courses (Bioinstrumentation):

- MATH 344*(4): Linear Analysis II
- IME 156 (2): Basic Electronics Manufacturing
- EE 251 (1): Electric Circuits Laboratory (EE 251 is the lab required for EE 201 lecture)
- Additional concentration courses can be found on [the catalog](#).

Concentration Courses (Mechanical Design):

- CE 207 (2)*: Mechanics of Materials II
 - If you have taken equivalent to CE 204 but not CE 207, enroll in CE 207.
 - If you still need CE 204 and CE 207, you can take them separately over two quarters OR enroll in CE 208 (5): Mechanics of Materials, which is designed specifically for transfers students this fall quarter. This course combines CE 204 and CE 207.
- ME 228 (2): Engineering Design Communication
- IME 141 (1): Manufacturing Processes: Net Shape
- MATH 344 (4): Linear Analysis II
- Additional concentration courses can be found on [the catalog](#).

5) Engineering Student Services:

Engineering Advising | Multicultural Engineering Program | International Exchange Program

Location: Building 40, Room 115

Phone: 805-756-1461

[Email](#)

[Website](#)

6) Biomedical Engineering (BMED) Department:

Location: Building 13, Room 260

Phone: 805-756-6400

[Website](#)

Permission Numbers for Major and Support Courses

- For help registering for BMED courses due to pre-requisite errors, please email Rebecca Burnside (rlburnsi@calpoly.edu) and cc Lily Laiho (llaiho@calpoly.edu). Departments may issue [permission numbers](#) which are special codes used for students to enroll in classes that have seats reserved for majors, or to override registration errors.